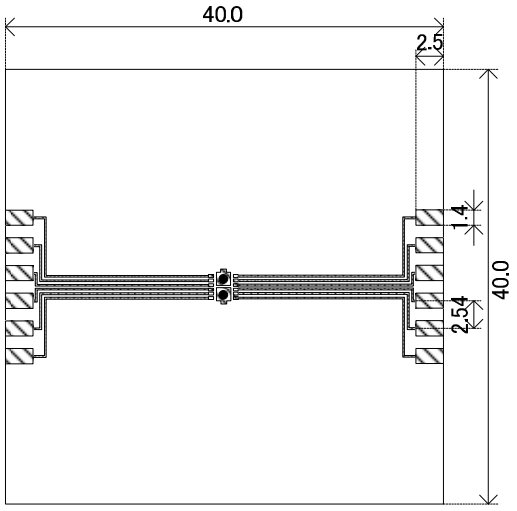
● USP-12B01 Power Dissipation

Power dissipation data for the USP-12B01 is shown in this page.
The value of power dissipation varies with the mount board conditions.
Please use this data as one of reference data taken in the described condition.

1. Test Condition (Reference data)

Condition: Mount on a board
Ambient: Natural convection
Soldering: Lead (Pb) free
Board Dimensions: 40 x 40 mm (1600 mm2 in one side)
Board Structure: Inner two metal layers, no large metal area in the front and back.
Copper Area 1st Inner Metal Layer about 50%
2nd Inner Metal Layer about 50%
Each Heatsink back metal is connected to the inner layers respectively.
Material: Glass Epoxy (FR-4)
Thickness: 1.6 mm
Through-hole: 2 x 0.8 Diameter
(One through-hole connection per one heatsink back metal)



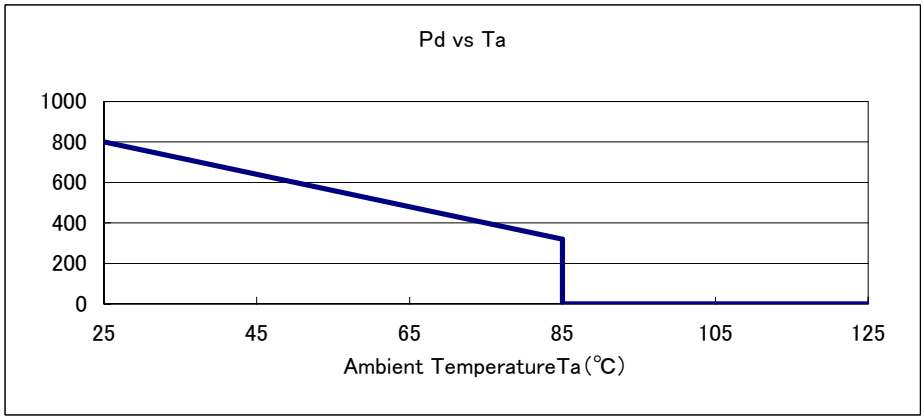
Evaluation Board (Unit: mm)

2. Power Dissipation vs. Ambient Temperature

1) 1ch Operation

Board Mount (Tj max = 125℃)

Ambient Temperature (℃)	Power Dissipation Pd (mW)	Thermal Resistance(℃/W)
25	800	125.00
85	320	



2) 2ch Operation

Board Mount (Tj max = 125℃)

Ambient Temperature (℃)	Power Dissipation Pd (mW)	Thermal Resistance(℃/W)
25	600	166.67
85	240